$\frac{1}{10}$ inch long, invested at the base with involucels similar to those of the males. Calyx limb irregularly 4-5 toothed. Corolla short, broadly tubular, 4-lobed to below the middle. Styles, 2. Drupe globose, $\frac{1}{6}$ inch diameter, blueish.

Hab. South Island, mountains near Lake Tekapo, Canterbury, altitude 4,000 feet; T.F.C. Uplands in the interior of

Otago, common; D. Petrie!

Mr. Petrie and myself had placed this, with some doubt, under *C. repens*. But Sir Joseph Hooker and Mr. N. E. Brown agree in considering it quite distinct from both *C. repens* and *C. pumila*. The infundibuliform corolla of the male flowers is certainly very distinct from the curved tubular one of *C. repens*.

ART. LII.—On Cyttaria Purdiei, Buch. By John Buchanan, F.L.S.

[Read before the Wellington Philosophical Society, 24th February, 1886.]

PLATE XI.

The present interesting ephiphytic fungus, although probably abundant in New Zealand, has not hitherto been noticed as occurring there in any scientific work. The genus *Cyttaria*, to which it belongs, is supposed to be limited in distribution to South America and Tasmania, where two species are known and used as food. They are always found epiphytic on species of *Fagus* or beech, and will probably be found wherever this family is abundant.

The internal cavity of this fungus has always been found empty; yet it is probable that in the earlier stages of the plant it may be filled with a gelatinous fluid, which is afterwards absorbed or dried up. This can only be proved by an examination of numerous specimens in different stages of growth.

REFERENCE TO PLATE.

Fig. 1. Branch of Fagus fusca with plants of Cyttaria purdiei adhering.
2. Young plants of Cyttaria purdiei, with the spore cups or cells still covered by a thin membrane.

3. Plant with the spore cups or cells divested of their membranous covering and empty.

 Section of plant, showing the empty cells with rounded bottoms, and the interior of the fungus empty.

5. Asci with sporidia.

6. Spores.